

### AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for producing a microarray which comprises a substrate and at least one spot of a sample on a surface of the substrate comprising:

applying droplets of a liquid sample containing a biological substance to a plurality of positions on a surface of a water repellent substrate by using a microarrayer of the ink-jet type having a jet tip, the microarrayer exerting a pressure on the liquid sample contained therein to eject a droplet amount of the liquid sample from the jet tip, to form a plurality of droplets which form a spot on the surface of the substrate,

wherein ~~a the~~ plurality of the droplets are applied to ~~positions whereat~~ predetermined positions apart from each other and wherein all the droplets join with one another to form the spot.

2. (Original) The method for producing a microarray according to claim 1, wherein the droplet is applied to a position where the droplet joins with a droplet or a drop consisting of a plurality of droplets that have already been applied to the surface of the substrate.

3. (Original) The method for producing a microarray according to claim 1, wherein the method further comprises:

imaging a square on the surface of the substrate, the square is filled with a plurality of circles, and

applying the droplets to respective positions of the circles.

4. (Original) The method for producing a microarray according to claim 2, wherein the method further comprises:

imaging a square on the surface of the substrate, the square is filled with a plurality of circles, and

applying the droplets to respective positions of the circles.

**Appl. No.** : **10/616,059**  
**Filed** : **July 9, 2003**

5. (Previously presented) The method for producing a microarray according to claim 1, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.

6. (Previously presented) The method for producing a microarray according to claim 5, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.

7. (Previously presented) The method for producing a microarray according to claim 2, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.

8. (Previously presented) The method for producing a microarray according to claim 3, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.

9. (Previously presented) The method for producing a microarray according to claim 4, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.

10. (Previously presented) The method for producing a microarray according to claims 7, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.

11. (Previously presented) The method for producing a microarray according to claims 8, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.

12. (Previously presented) The method for producing a microarray according to claims 9, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.

13. (New) The method of claim 1, wherein the positions between the droplets is equal to the sum of the respective radii of the droplets.